LANDSCAPE ORDINANCE

(COLLEGEDALE CITY ORDINANCE #742 AND ORDINANCE AMENDMENT #762)

14-501. Purpose

Collegedale's scenic landscapes are closely tied to the community's quality of life, community identity, and civic pride. These landscapes also form the critical first impressions of potential new employers, homeowners, and tourists, thus affecting Collegedale's economy.

Landscaping provides important environmental benefits such as reducing air pollution and storm water runoff, improving water quality, and creating wildlife habitats. Landscaping requirements are one of the many tools used for protecting and enhancing a community's scenic quality and visual character of the community.

The purpose and intent of this Article are the following:

- To promote the scenic quality and visual character of the community;
- To improve the appearance of parking areas and property abutting public rights-of-way;
- To protect property values;
- To reduce storm water runoff and improve water quality;
- To provide transition between incompatible land uses;
- To provide relief from traffic, noise, heat, glare, dust, and debris;
- To stabilize soil and prevent erosion;
- To encourage preservation of desirable trees; and
- To filter pollutants from the air and release oxygen.

14-502. Definitions

Caliper – a measurement of the trunk diameter measured at 2 ½ feet above grade level.

Class 1 Shade Trees – any plant having a central trunk, an expected maturity height of at least 35 feet, and an expected minimum mature canopy spread of 20 feet.

Gross Floor Area – GFD the total interior space as defined by the Southern Building Code.

Impervious Surfaces – includes concrete, asphalt, brick, metal, or any other material constructed or erected on landscaped or natural buffer areas that impede the percolation of water into the ground.

Interior Parking Bay – all parking bays that do not qualify as a perimeter bay.

Landscaped area/Landscape yard – an area to be planted with grass, trees, shrubs or other natural ground cover. No impervious surfaces are permitted in these areas.

Landscaped Peninsula – a landscaped area defined by a curb and surrounded by paving on three sides.

Natural Buffer – an area of land set aside for preservation in its natural vegetative state. Plants may not be removed with the exception of poisonous or non-native plant species. In addition, fill/cutting activities, storage of materials, and impervious surfaces are not permitted in these areas.

New Development – construction of a new building or structure on its own low is considered as new development. New buildings or structures constructed on a lot which already contains existing buildings is considered as an expansion.

Ornamental Shade Trees – any plant having a central trunk, a maximum expected maturity height of 25 feet.

Perimeter Bay – all parking bays that are adjacent to the perimeter of a development.

Screening Shrubs – evergreen shrubs that maintain foliage year-round.

Screening Trees – evergreen trees that maintain foliage year-round.

Street Yard – a designated landscaped area where private property abuts the public street right-of-way for planting of grass, trees, and shrub.

14-503. General Provisions

A. Applicability

The requirements of this Section shall apply to:

- 1. All new Public/Private/Institutional or Assembly, Developments and all Residential Housing (R1-3)
- 2. Existing Public/Private/Institutional or Assembly, Developments and all Residential Housing (R1-3)
 - For existing developments and parking facilities, expansion in gross floor area (GFA) or parking spaces will trigger landscaping requirements based on the scope of work proposed as established below.
 - Landscaping requirements shall not prevent an existing manufacturing facility from expanding.
 - Where both the building expansion and parking lot expansion requirements are applicable, the building expansion requirements shall supercede.

B. Building Expansions

When an expansion:

- 1 Increases GFA at least 10% but no more than 25%, then;
- The entire property shall comply with the landscaped street frontage buffer or parking lot landscaping requirements (option of applicant)
- 2 Increases GFA more than 25%, then;
- Meet all of the landscape ordinance requirements.

C. Parking Lot Expansions

When an expansion:

- a. Of at least 10 spaces increases the total number of parking spaces no more than 25%, then;
- The expanded portion of the parking lot shall comply with the landscaping requirements
- b. Of at least 10 spaces increases the total number of parking spaces more than 25%, but no more than 50%, then:
- 50% of the existing parking lot(s) within the property and all of any expanded parking lot portions shall comply with the parking lot landscaping requirements
- c. Of at least 10 spaces increases the total number of parking spaces more than 50%, then:
- The expanded and existing parking lot(s) within the property shall comply with the parking lot landscaping requirements.

D. Exemptions:

- Previously approved developments, which have been given a permit to begin construction prior to the adoption of this ordinance, are exempt.
- Town Homes with rear loading and which are designed not to have lawns.
- **E. Replacement.** Vegetation planted or preserved according to an approved landscape plan shall remain alive for minimum of 5 years from the date of certificate of occupancy. Vegetation planted or preserved that does not remain alive for 5 years shall be replaced with equivalent vegetation. Preserved trees for which credit was awarded but which subsequently die, shall be replaced with a tree of the same variety of at least 4" caliper, and at least 18 feet in height. The Replacement of dead landscape material shall be the responsibility of the current property owner.
- **F. Irrigation.** Required landscaping shall be irrigated by one of the following methods for R3 and all Commercial Zoning:
 - An underground sprinkler system;
 - Automatic drop system; or
 - A hose attachment within 100 feet of all landscaped areas.

14-504. LANDSCAPE/PLANT Installation Plan Submittal

Proposed developments subject to the provisions of this Section and prior to or at the time of receiving a Site Plan Approval shall submit a Landscape/Plant Installation Plan prepared by a registered landscape architect or by a licensed Landscape professional to the Collegedale Building Inspections Office, and all of the requirements of that plan must be fulfilled before a Certificate of Occupancy may be granted. This Landscape/Plant Installation Plan may be incorporated into a site plan, provided the scale is not less than 1 inch equals 40 feet. The following elements shall be shown on the Landscape/Plant Installation Plan:

- Street Frontage buffer as required for all non residential, High Density, and Industrial developments;
- Interior parking lot landscaping as required for all non residential, High Density, and Industrial developments;
- Perimeter landscaping as required for all non residential, High Density, and Industrial developments;
- Zoning of site and adjoining properties;
- Existing and proposed contours at 2 feet intervals or less;
- Boundary lines and lot dimensions;
- Date, graphic scale, north arrow, title and name of owner, and the phone number of the person or firm responsible for the landscape plan;

- Location of all proposed structures and storage areas;
- Drainage features and 100-year floodplain, if applicable;
- Parking lot layout including parking stalls, bays, and driving lanes;
- Irrigation plan;
- Existing and proposed utility lines, and easements;
- All paved surfaces and curbs;
- Existing trees or natural areas to be retained;
- Location of all required landscaping areas (street yard, landscaped peninsulas, landscaped islands, foundation plantings, and screening buffers);
- Location, installation size, quantity, and scientific and common names of landscaping to be installed; and
- The spacing between trees and shrubs used for screening;
- Sight triangles
- 1. Replacement. Vegetation planted or preserved according to an approved landscape plan shall remain alive for minimum of 5 years from the date of certificate of occupancy. Vegetation planted or preserved that does not remain alive for 5 years shall be replaced with equivalent vegetation. Preserved trees for which credit was awarded but which subsequently die, shall be replaced with a tree of the same variety of at least 4" caliper, and at least 18 feet in height. The Replacement of dead landscape material shall be the responsibility of the current property owner. If any of the material should fail to survive during that period it would be replaced during the appropriate planting season
- **2. Irrigation.** Required landscaping shall be irrigated by one of the following methods for R3 and all Commercial Zoning:
- An underground sprinkler system;
- Automatic drop system; or
- A hose attachment within 100 feet of all landscaped areas.
- **3. Five-year guarantee.** Guarantee from the developer that all plant materials will be warranted for a period of 5 years from the time of installation. If the developer sells the property, the new owner assumes responsibility for maintaining all landscaping.
- **4. Soil and Climatic Conditions.** Trees and other vegetation shall be planted in soil and climatic conditions which are appropriate for the growth habits. Plants used in the landscape design shall to the greatest extent be:
- Appropriate to the conditions in which they are to be planted;
- Have non-invasive growth habits;
- Encourage low maintenance, high quality design; and
- Be otherwise consistent with the intent of this Ordinance.

14-505. Hardships

1. Intent

This section does not intend to create undue hardship on affected properties. The required landscaping should not exceed 15% of the total area. For existing developments, where the GFA or parking areas are being increased, the loss of off-street parking spaces (required by zoning ordinance) as a result of compliance with the landscaping provisions should not exceed 10%.

2. Special Administrative Remedies

- a. Lots which front on more than one street with the following special exception:
- All street frontages other that the primary street frontage may have a landscaped street frontage buffer with a minimum depth of 4 feet.
- b. In situations where the landscape requirements would result in the demolition of an existing building, a loss of more than 10% or the gross required off-street parking for an existing development; or a loss greater than 15% of the lot area for development, the following administrative remedies may be applied:
- Reduce the required minimum landscaped area widths up to 50%; and
- Reduce the tree planting requirements by up to 25%.

3. Administrative Guidelines

- Where possible, reduction of landscaping requirements in one area should be offset by an increase of landscaping requirements in other portions of the site.
- The first priority is to provide trees and shrubs along the street frontage.
- The second priority is to provide trees within portions of the parking lot that are highly visible from the street.
- A screen should always be provided if it is required by this Section. Where there are space limitations, reduce the landscape yard as necessary. If the planting area is less than 5 feet in width, require a minimum 6 feet tall wood or composite fence or masonry wall.

4. Conflict With Other Articles in the Zoning Ordinance and Existing Zoning Conditions

Where any requirement of this section conflicts with the requirement of another Article of existing zoning conditions in the Zoning Ordinance, the most restrictive requirement shall apply.

• The Project at all times should meet the minimum Landscape Requirements of this Ordinance.

14-506. Landscape Street Frontage Buffer

- **A. Purpose.** The landscaped street frontage buffer serves two primary purposes:
 - 1. When a parking lot is located adjacent to a public right-of-way, a strip of landscaping helps shield projecting headlights that may impair the vision of passing motorists or pedestrians therefore creating a safer environment.
 - 2. It also provides an aesthetically pleasing transition from the public right-of –way to private property.
 - **3.** Allows the motorist or pedestrian to see the commercial building's façade but not the parking lots, thus hiding the parking areas from view.
- **B. Prohibitions.** Parking, merchandise display and off-street loading are prohibited in the landscaped street frontage buffer, and signage.



C. Buffer Options. The site plan for any Commercial development, other than that exempt in Section 14-502 Exemptions, shall show a landscaped street frontage buffer along all public right-of-ways. The applicant may choose one or a combination of the 5 options illustrated below to meet the particular site constraints of the development.

1. 10' Buffer Strip:

- a. Minimum width: Ten (10) feet.
- **b.** *Minimum number of trees required:*
 - One (1) shade tree and one (1) ornamental tree per twenty-five (25) linear feet of street frontage.
- **c.** *Minimum number of shrubs required:*
 - Twelve (12) shrubs per twenty-five (25) linear feet of street frontage. A minimum of 50% of shrubs required shall be evergreen.

2. Earth Berm:

- **a.** Minimum Height. Two and one-half $(2\frac{1}{2})$ feet higher than the finished elevation of the parking lot.
- **b.** *Minimum number of trees:* One (1) shade tree and one (1) ornamental tree per twenty-five (25) linear feet of street frontage.
- **c.** *Minimum Number of Shrubs*: Five (5) shrubs per twenty-five (25) linear feet of street frontage. A minimum of 50% of the shrubs required shall be evergreen.

3. 6' Buffer Strip:

- **a.** *Minimum width.* Six (6) foot landscaped street buffer with three (3) feet of fall away from street, and out of the right of way.
- **b.** *Minimum number of trees.* One (1) shade tree and one (1) ornamental tree per twenty-five (25) linear feet of street frontage.
- **c.** *Minimum number of shrubs.* Three (3) shrubs per twenty-five (25) linear feet of street frontage. A minimum of 50% of shrubs required shall be evergreen.

- **4. 25' Buffer Strip:** A landscaped buffer area with existing woodlands maintained in twenty-five (25) feet strips along the street frontage.
 - **a.** Existing woodlands to be set aside shall have a minimum depth of twenty-five (25) feet as measured from the public street right-of-way;
 - **b.** Number of woodland trees (not including prohibited trees) having a minimum caliper of 6 inches shall equal or exceed the minimum street planting ratio of one (1) shade tree and one (1) ornamental tree per twenty-five (25) feet per linear feet;
 - **c.** No impervious surfaces are permitted within the protected woodlands area except for approved access points to the site; and
 - **d.** No cutting/filling activities or storage or materials/equipment are permitted within the protected woodlands.

D. Groundcover.

- 1. Living Material. Living materials, such as grass, shall make up a minimum of 80% of the groundcover for the landscaped street frontage buffer. 100% of living materials is encouraged.
- **2. Mulch.** Wood mulch or Pine straw may make up 20% of the groundcover for the landscaped street frontage buffer. Weed barrier shall be required. Gravel, concrete, brick pavers or other pavement is not appropriate groundcover for the street frontage buffer.
- **E. Massing.** Massing is multiple rows of alternating plant materials with a combination of trees and shrubs. Massing is strongly encouraged. The maximum distance between massing is 25 feet. Massing should be integrated into a bed or in a curb to ease maintenance.
- F. **Sight Distances.** A sight distances at intersections and points of access must be maintained. No landscaping shall constitute a hazard to traffic including, but not limited to landscaping located within the required sight triangle of an intersection.

G. Exemptions/Special Situations

1. Where overhead power lines encroach into the street yard, smaller ornamental shade trees can be substituted for shade trees (see Plant Installation Specifications Section: Ornamental shade trees)

14-507. Landscape Perimeter

Perimeter landscaping is a peripheral planting strip along rear and side lot lines that separate uses.

- A. **Purpose.** Perimeter landscaping
- 1. Defines parking areas;
- 2. Prevents two adjacent lots from becoming one large expanse of pavement;
- 3. Provides vegetation in densely developed areas;
- 4. Vehicular use areas shall be screened from view of public streets and adjacent uses in accordance with the following standards, and
- 5. Enhance the appearance of individual properties.

- B. **Requirement.** The site plan for any Commercial, High Density, Indsutrial development, other than those exempt, shall show perimeter landscaping, in addition to the landscaped street frontage buffer required in Section 14-503.
- 1. Width. A five (5) foot landscaped strip is required along the side and rear lot lines of a development.
- 2. **Minimum number of trees.** One (1) tree per fifty (50) linear feet.
- 3. **Continuous Visual Screen.** The planting strip shall contain a continuous hedge composed of a double staggered row of evergreen shrubs with a minimum planting height of thirty (30) inches and maximum center spacing of three (3) feet.
- 4. **Groundcover.** All perimeter landscaped areas not dedicated to preservation of existing vegetation shall be landscaped with groundcover.
- a. *Living Material*. Living materials, such as grass, shall make up a minimum of 80% of the groundcover for the landscaped perimeter. 100% of living material is strongly encouraged.
- b. *Mulch*. Wood mulch or Pine Straw may make up 20% of the groundcover for the landscaped perimeter. Gravel, concrete, brick pavers or other pavement is not an appropriate groundcover. Weed barrier shall be required.
- 5. **Screened Backfill.** Soil used in parking lot islands, driveways medians, and other areas internal to a vehicular use area shall be screened prior to deposition in planting areas.
- **C. Vehicular Access.** The perimeter landscaping requirement does not preclude the need for vehicular access to be provided between lots.
- **D. Adjacent Properties.** The five (5) foot perimeter strip is required for each development regardless if one is already in place from an adjacent, developed lot.
- **E. Pavement.** No pavement may be located within five (5) feet of the property line on any lot unless it is included with an ingress/egress location.

14-508. Screening

A. Intent. To provide a transition between land uses and to protect the integrity of less-intensive uses from more intensive uses, screening and buffering will be required. The purpose of the screen is to provide a year-round visual obstruction. The buffer provides transition between the incompatible uses by requiring a landscape yard of minimum specified depth along the shared property line.



Example: Proper Screening of Commercial Building.

B. Procedure. Refer to the matrix below to determine any screening requirements for the proposed development. First, identify the type of zoning for the proposed development (along the left side of matrix) and each adjoining property (along the top of matrix). Find where the zoning of the proposed development and each adjoining property intersect on the matrix. If a screen is required, a capital letter will indicate the type of screen to be applied. A description of each screen type is provided in this section.

Adjacent Property

Proposed		Industrial	Commercial	University	High-Density Residential	Low-Density Residential
	Industrial	X, D	C, E, D	B, E, D	A, E, D	A, E, D
	Commercial	C, E, D	X, D, E	B, E, D	B, E, D	B, E, D
	University	C, E, D	C, E, D	X, D	B, E, D	B, E, D
	High-	A, E, D	B, E, D	C, E, D	C, E, D	C, E, D
	Density					
	Residential					
	Low-	A, E,	B, E,	C, E,	C, E,	C, E,
	Density					
	Residential					

^{*}Zoning Districts are not considered to be adjacent if separated by a right-of-way of at least fifty (50) feet in width. (Added 10/4/10)

X = No Screen Required

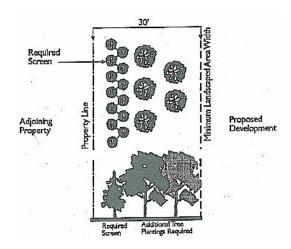
ZONING DISTRICTS

Industrial	I-1
Commercial	C-1, C-2, C-3 and MU-TC
University	U-1
Residential (High Density)	R-1-H, and R-3
Residential (Low Density)	R-1-L, and R-2

C. Screening Types

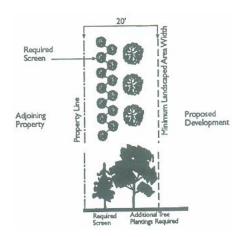
Type A – 30 feet deep Landscape Yard planted with:

- Evergreen trees spaced a maximum of 10 feet on-center or two staggered rows (spaced a maximum of 7 feet apart) of shrubs spaced a maximum of 8 feet on-center; and
- 2 rows of Class 1 Shade Trees spaced a maximum of 35 on-center.
- All plantings shall meet the installation and planting size requirements specified in the Plant Installation Specifications section.



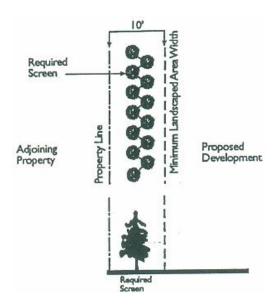
Type B − 20 feet deep Landscape Yard planted with:

- Evergreen trees spaced a maximum of 10 feet on-center or two staggered rows (spaced a maximum of 7 feet apart) of shrubs spaced a maximum of 8 feet on-center; and
- 1 row of Class 1 Shade trees spaced a maximum of 35 feet on-center.
- All plantings shall meet the installation and planting size requirements specified in the Plant Installation Specifications section.



Type C – 10 feet deep Landscape Yard planted with:

- Evergreen trees spaced a maximum of 10 feet on-center or two staggered rows (spaced a maximum of 7 feet apart) of shrubs spaced a maximum of 8 feet on-center;
- All plantings shall meet the installation and planting size requirements specified in the Plant Installation Specifications section.



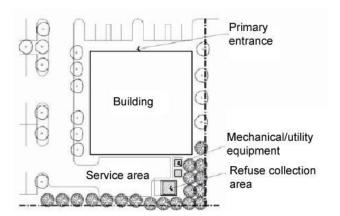
Type D – Screening of Dumpsters – Screened in the manner described below:

- Screening shall be a minimum height of 6 feet.
- All four sides of the dumpster shall be screened.
- The screen should incorporate access to the dumpster by using a wood fence or other opaque device as a gate, chain length fencing is not allowed in this application.
- Screening materials can be any combination of evergreen plantings, wood, composite or masonry material.



Example: Properly Screened Dumpster

Type E – Screening of Service areas, maintenance areas, equipment areas, and building or ground mounted mechanical equipment, including but not limited to transformers, backflow preventers, telephone risers or equipment cabinets, generators, or similar devices. Also loading docks, berths, or similar spaces. Also outdoor storage of materials, stock or equipment. Also water meters, gas meters, electrical meters, air-conditioning, or similar HVAC device equipment. Must be screened from offsite views.



Example: Site elements like dumpsters or mechanical/utility equipment or other service areas can be screened with vegetation or walls.



Example: Vegetative Screen around HVAC system.

Type F – Stormwater Facilities – located in the landscaped yard subject to the following conditions:

- No rip-rap, crushed stone, concrete or other impervious materials are exposed.
- Trees and other living organic materials can be planted along the stormwater facility as long as the plantings do not interfere with the intended use of the facility.

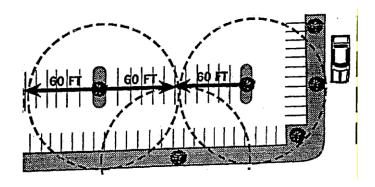
14-509. Parking Lot Requirements

A. Intent

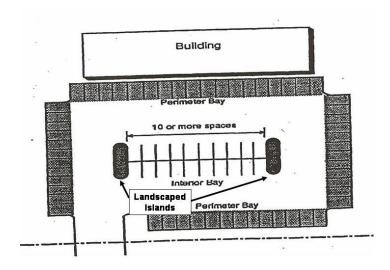
The intent of this section is to break up the expanse of pavement, to provide shade, and to reduce glare from parked cars and loading docks.

B. Design Criteria

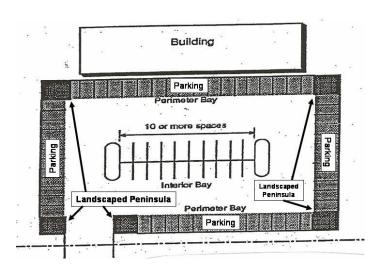
1. No Parking space can be more that 60 feet from a tree.



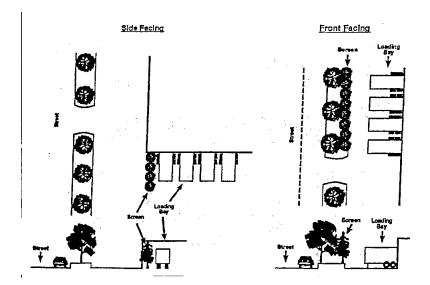
2. Ends of all interior parking bays that contain ten (10) or more contiguous parking spaces shall be bordered on both sides by a landscaped island. (Amended 10/4/10)



3. Ends of all perimeter parking bays shall be bordered by a landscaped peninsula. (**Graphic amended** 10/4/10)

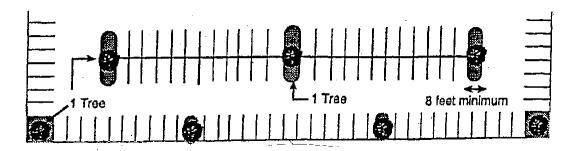


4. Side and front-facing truck delivery stalls and loading bays shall be screened from the public right-of-way as described below.



C. Dimensions/Planting Criteria

1. Landscaped islands and peninsulas used to meet the landscape requirements.



- 2. Shall have a minimum width of eight (8) feet and a minimum landscaped area of 200 square feet.
- 3. Landscaped islands and peninsulas used to meet the landscaping requirements shall be planted with at least one tree.
- 4. The trees referred to in this parking section are Class 1 Shade trees (see Plant Installation Specifications Section). In the special situations specified below, smaller Ornamental Shade Trees may be substituted for Class 1 Shade trees:
 - a. An overhead obstacle such as a canopy or power lines limits the tree height;
 - b. The tree is located within 20 feet of a building.
- 5. All landscaped islands and peninsulas shall be bordered by a curb or a wheel stop.

- 6. The screening material for loading docks and delivery stalls shall consist of the following:
 - a. One row of evergreen shrubs spaced a maximum of 5 feet on-center or a row of evergreen trees spaced a maximum of 10 feet on-center (See Plant Installation Specifications Section for a list of recommended plantings); and
 - b. Provide a landscaped yard with a minimum depth of 8 feet for the planted screen.
- 7. Groundcover. All interior parking lot landscaped areas not dedicated to preservation of existing vegetation shall be landscaped with groundcover. Weed barrier shall be required.
 - a. *Living Material*. Living materials, such as grass, shall make up a minimum of 60% of the groundcover for the interior parking lot landscaping. 100% of living materials is strongly encouraged.
 - b. Non-living material. Non-living materials, such as wood mulch, pine straw, or decorative rock (3/4" or smaller gravel in a natural color tone), may make up 40% of the groundcover for the interior parking lot landscaping. Weed barrier shall be required..
 Brick pavers or other pavement is not appropriate non-living groundcover.
- **D.** Vehicular Display Areas. Applicants shall select one of the following options for vehicular display areas:
 - 1. Compliance with Standard. Comply with the interior parking lot landscaping requirements described in this section and the required Landscaped Street Frontage Buffer requirements in Section 14-503; or
 - 2. Increase Street Frontage Buffer. In lieu of the interior parking lot landscaping requirements, increase the required street frontage buffer to 15' wide and install the number of trees required for the interior landscape requirements within the street frontage buffer.
- **5.** Wheel Stops. Except as provided below, all landscape areas at the front line of off-street parking spaces must be protected from encroachment of intrusion of vehicles through the use of wheel stops or curbs.
- **Minimum Height.** Wheel stops shall have a minimum height of six inches (6") above the finished grade of the parking area.
- **Anchoring.** Wheel stops shall be properly anchored and shall be continuously maintained in good condition by the property owner.
- Location. Wheel stops shall not be placed in locations of anticipated pedestrian traffic.

14-510. Residential (R1-R2)



A minimum of two (2) shade trees or four (4) ornamental trees, as specified by Section Plant Installation Specification's, minimum size, shall be planted in the front yard, or within ten (10) feet of front of residence in side yard, for each new residential lot in the R1 and R2 residential districts. R-3 for the purposes of this Landscape Ordinance is considered to be a "Commercial" development and must comply with the Sections on Commercial Developments. Trees existing in the front lawn can be credited towards the Landscaping Requirements as per section 14-509. The tree or trees shall be planted prior to receiving a Certificate of Occupancy. Screening Requirements in Section Screening are required to be installed prior to receiving a Certificate of Occupancy (Screening Requirements met with shrubbery cannot be used to offset shrubbery requirements within this Section). Shrubs will be required at a rate of seven (7) per 1000 heated square feet of a residential dwelling and will comply with all standards and planting requirements within this Ordinance, and will be installed prior to receiving a Certificate of Occupancy. Lawn Grass is required in all front yards and areas of property that are visible from any road. Before a Certificate of Occupancy can be issued, lots that are three-quarters (3/4) of an acre or smaller shall be sodded, and lots larger than three-quarters (3/4) of an acre shall be seeded and strawed with grass growing (Annual Rye is not an acceptable form of grass). (Updated 10/4/10)

Example:

Prior to getting a Certificate of Occupancy for a 2400 square foot house the following must be done to meet the requirements of this Ordinance.

- A minimum of 16, 3 gallon shrubs must be planted.
- The grass on the lawn must be at a minimum of three inches high.
- Air conditioning equipment, electrical, gas, and water meters must be screened.

• A minimum of 2 shade trees or 4 ornamental trees must be planted.

14-511. Utility Easements

A. Intent

To avoid damage to utility lines and landscape plantings, all trees and shrubs should be planted outside of existing and proposed utility easements.

B. Policy

1. Any tree or shrub used to meet the requirements of this Article shall not be located within proposed or existing utility easements unless it meets one of the special exceptions as defined below.

Special Exceptions

- 1. Written permission has been obtained from the holder of the utility easement.
- 2. Where overhead power lines cross an area required by the ordinance to be planted with shade trees, smaller Ornamental trees may be substituted.
- a. If none of the special exceptions above apply, the following options shall be considered in order of priority:
- 1. **Priority 1.** Plant the tree as close to the easement as possible.
- 2. **Priority 2.** For highly visible areas (street yard, parking lots in front) plant the tree in the same general where area where it can be seen from the street or parking lot.

14-512. Plant Installation Specifications

A. Intent

All landscaping materials shall be installed according to accepted planting procedures of the landscape industry. Planting methods and the season of planting will optimize chances for long-term plant survival.

B. Class 1 Shade Trees

These trees are intended to be used to meet the tree planting requirements specified in the Landscaped Street Frontage Buffer, Landscaped Perimeter, Residential Landscaping, and Parking Lot Sections. All Class 1 Shade Trees shall be installed at a minimum caliper of 2 inches as measured from 2 ½ feet above grade level. Class 1 Shade Trees shall also have a minimum expected maturity height of at least 35 feet and a minimum canopy spread of 20 feet. Evergreen trees can be treated as Class 1 Shade Trees provided they meet the minimum maturity height and canopy spread criteria.

Recommended Species

- Southern Sugar Maple
- Sugar Maple

- River Birch
- European Hornbeam
- American Hornbeam
- Katsura Tree
- Yellowwood
- Ginkgo (use male only)
- Seedless Honey Locust
- Sweetgum
- Dawn Redwood
- Black Gum
- American Hophornbeam
- Chinese Pistache
- White Oak
- Swamp White Oak
- Scarlet Oak
- Overcup Oak
- Water Oak
- Willow Oak
- Northern Red Oak
- Shumard Oak
- Japanese Pogodatree
- Littleleaf Linden
- Princeton American Elm
- Bald Cypress
- Japanese Zelkova

C. Ornamental Shade Trees

These tress are intended to be used for planting under overhead power lines only where they encroach into the property. All Ornamental Shade Trees shall be installed at a minimum caliper of 1½ inches as measured at 2½ feet above grade level from the base of the tree. Ornamental Shade Trees shall have a maximum expected maturity height of 20 feet and minimum canopy spread of 10 feet.

Recommended Species

- Bloodgood Japanese Maple
- Trident Maple
- Hedge Maple
- Amur Maple
- Serviceberry
- Redbud
- Flowering Dogwood
- Kousa Dogwood

- Thornless Cockspur Hawthorne
- Winter King Hawthorne
- Golden Raintree
- Crapemyrtle
- Sweetbay Magnolia
- Okame Cherry
- Autumn Flowering Cherry
- Yoshino Cherry

D. Screen Trees

Screening Trees are used to meet the tree planting requirements of the Screening Section. All screening trees shall be installed at a <u>minimum height</u> of 8 feet and have a <u>minimum expected mature spread</u> of 8 feet.

Recommended Species

Common Name

- Sapphire Cypress
- Atlas Cedar
- Deodar Cedar
- Leyland Cypress
- Foster Holly
- American Holly
- Eastern Red Cedar
- Southern Magnolia
- Shortleaf Pine
- Canadian Hemlock
- Carolina Hemlock
- American Arborvitae
- Green Giant Arborvitae

E. Screening Shrubs

All Screening shrubs shall be installed at a minimum size a minimum size of 3 gallons and have an expected maturity height of at least 8 feet and a mature spread of at least 5 feet.

Recommended Species

- English Holly
- Burford Holly
- Nellie R. Stevens Holly
- Wax Mirtle
- Cherrylaurel

- English Laurel
- Eastern Arborvitae
- Leatherleaf Viburnum

F. Foundation and Landscape Shrubs

All foundation and screening shrubs shall be installed at a minimum size of 3 gallons.

Recommended Species

Common Name

- Creeping Juniper
- Japanese Holly
- Shore Juniper
- Pfitzer Juniper
- Foster Holly
- Helleri Holly
- Youpan Holly
- Inkberry Holly
- Nandina (all cultivars)
- Leatherleaf Viburnum
- Barberry (all cultivars)
- Azalea
- Mop Cypress
- English Holly
- Burford Holly
- Dwarf Burford Holly
- Cherry Laurel
- Crape Mirtle
- Fragrant Olive
- Burning Bush
- Ever-Blooming Rose
- Forsythia
- Japanese Barberry
- Otto Laurel
- Skipp laurel

G. Prohibited Plants

The following plants are prohibited from being used to meet these requirements due to problems with hardiness, maintenance, or nuisance:

- Silver Maple
- Tree of Heaven
- Mimosa
- Garlic Mustard
- Asian Bittersweet
- Air-potato
- Autumn Olive
- Thorny Olive
- Winter Creeper
- English Ivy
- Sericea Lespedeza
- Chinese Privet
- Common Privet
- January Jasmine
- Japanese Honeysuckle
- Amur Bush Honeysuckle
- Morrow's Bush Honeysuckle
- Tartarian Honeysuckle
- Bush Honeysuckle
- Purple Loosestrife
- Japanese Grass
- Mulberry
- Eurasian Water Milfoil
- Princess Tree
- Common Reed
- Japanese Knotwood, Japanese Bamboo
- Silver Poplar
- Kudzu
- Bradford Pear
- Multiflora Rose
- Tropical Soda Apple
- Johnson Grass
- Japanese Spiraea
- Siberian Elm

14.513. Landscape Installation Requirements

- A. Location
- 1. **Drainage.** Trees shall not be placed where they interfere with site drainage.
- **2. Overhead Utilities.** Trees shall not be placed where they require frequent pruning in order to avoid interference with overhead power lines. In such locations, small ornamental trees are encouraged.
- 3. Water Lines. Landscaping shall be installed at locations that avoid placement directly above water lines.
- **4. Fire Hydrants.** Landscaping shall not be placed within six (6) feet of a fire hydrant.
- **5. Foundation Planting Requirement.** On lots containing nonresidential and mixed uses, shrubs shall be placed around the building perimeter of the primary façade, a minimum of three feet from the building.



Example: of Foundation Planting.



- **B. Minimum Size.** Immediately upon planting, trees shall meet the minimum requirements:
- Ornamental Trees 2.0" Caliper
- Evergreen Trees 8' in height
- Shade Tree 2.5" in caliper
- Shrubs 24" in height and in a 3 gallon pot, if not ball and burlaped.

All plant material shall meet the requirements established by the American Association of Nurserymen publication "American Standard for Nursery Stock" (ANSI Z60.1 latest edition.)

- C. Species Mix. When more than ten (10) trees are to be planted to meet the requirements of this ordinance, a mix of species shall be provided. The number of species to be planted shall vary according to the overall number of trees required to be planted. The minimum number of species to be planted is listed below. Species shall be planted in proportion to the required mix. This species mix shall not apply to areas of vegetation required to be preserved by law.
- 11-20 required trees = 2 Species (but no more than 70% of each)
- 21-30 required trees = 3 Species (but no more than 40% of each)

- 31-40 required trees = 4 Species (but no more than 40% of each)
- 41+ required trees = 5 Species (but no more than 40% of each)

14.514. Enforcement and Maintenance

- **A. Final Occupancy Permit.** If the landscaping has not been installed and inspected for proper installation prior to receiving the Certificate of Occupancy, a Temporary Certificate of Occupancy may be granted provided the following conditions are met:
- 1. Property owner posts a construction bond with the City Finance Department;
- 2. The amount of the bond or letter of credit shall be based on material and installation costs of the uninstalled landscape material, including a 25% contingency cost, as shown on the submitted landscape plan; and
- 3. The cost of the landscaping shall be certified by a licensed landscape contractor.

After receiving the Temporary Certificate of Occupancy, the remaining landscape material shall be installed within 90 days from the date the Certificate of Occupancy is issued. The bond shall be called if the required landscaping has not been installed by the end of the 90 day period and the funds applied to complete the landscaping work.

B. Maintenance.

- a. The owner shall be responsible for the maintenance of all landscape areas not in the public right-of-way.
- b. Unless otherwise specified by the City, owners shall be responsible for maintaining street trees planted adjacent to the site in conjunction with construction.
- c. Homeowners Associations are responsible for the maintenance of open lots, medians, street trees associated with the development.
- d. Landscape areas shall be maintained in accordance with the approved Landscape Plan and shall present a healthy and orderly appearance free from refuse and debris.
- e. All plants shown on an approved Landscape Plan used to meet a minimum requirement of this Ordinance shall be replaced if they die, are seriously damaged, or a new timeline for a new landscape plan and new landscaping is installed.

C. Damage Due to Natural Occurrence.

- **a.** In the event that any vegetation or physical element functioning to meet the standards of this subsection is severely damaged due to an unusual weather occurrence or natural catastrophe, or other natural occurrence such as damage by wild animals, the owner or developer may be required to replant if the landscape standards are not being met.
- **b.** The owner shall have one growing season to replace or replant.

D. Protection During Operations

a. The owner or developer shall take actions to protect trees and landscape from unnecessary damages during all facility and site maintenance operations. Plants shall be maintained in a way that does not obstruct sight distances or roadway and drive intersections, obstruct traffic signs or devices, and/or interfere with the use of sidewalks or pedestrian trails.

E. Maintain Shape

a. All required trees shall be maintained in their characteristic natural shape, and shall not be severely pruned, sheared, topped, or shaped as shrubs. Trees required by this chapter that have been severely pruned, sheared, topped, or shaped as shrubs that no longer meet their intended function shall be considered as damaged vegetation in need of replacement, and shall be replaced within one growing season.



Example: Severe pruning or shaping interferes with the tree's intended purpose as a screening element, and may require the tree to be replaced.

14.515. Stormwater Credits

RESERVED FOR FUTURE USE

14.516. Tree Preservation Credits

- **A. Healthy Trees.** No tree preservation credits will be allowed for any dead tree, any tree in poor health or any tree subjected to grade alterations.
- **B. Protection during Construction.** Trees for which credit is given shall be protected during construction from:
- 1. Mechanical injuries to root, trunk, and branches;
- 2. Injuries by chemical poisoning;
- 3. Injuries by excavation; and
- **4.** Injuries by paving.

C. Credit options. If an applicant is preserving trees, the applicant may use the existing trees as credit either toward a reduction in parking requirements or in a reduction of the number of trees required, as described below and as approved by the Planning Commission.

1. Reduction of parking requirements.

To allow an existing or new development to preserve trees within or adjacent to a parking lot, the number of required off street parking spaces may be reduced as described below;

Parking Space Reduction Credits

- Total Diameter of all Preserved Trees: 4-7.9 inches = 1 parking space credited
- Total Diameter of all Preserved Trees: 8-22.9 inches = 2 parking spaces
- Total Diameter of all Preserved Trees: 23-29.9 inches = 3 parking spaces
- Total Diameter of all Preserved Trees: 30+ inches = 4 parking spaces
- **2. Reduction of required trees.** Preservation and protection of existing trees on the lot may be credited toward the tree planting requirements. Credit for preserved trees shall be permitted at the following rates:
- Diameter of Preserved Tree: 4-7.9 inches = 1 shade tree
- Diameter of Preserved Tree: 8-22.9 inches = 2 shade trees
- Diameter of Preserved Tree: 23-29.9 inches = 3 shade trees
- Diameter of Preserved Tree: 30+ inches = 4 shade trees

14.517. Appeals

Any person aggrieved by the administration, interpretation, or enforcement of this Section may appeal to the Board of Zoning Appeals within 60 days of the Building Inspection Office's decision. Decisions of the Board of Zoning Appeals may be appealed to a court of competent jurisdiction. Should any court of competent jurisdiction find any portion of this Section to be unlawful or unconstitutional, such finding shall not affect this Section as a whole or any portion of it not found invalid.

Unique factors relating to topography, soil and vegetation conditions, space limitations, or uses of neighboring property may make landscaping impossible, ineffective or unnecessary. **Section 14-502** <u>General Provisions</u>, C. **Hardships** provides administrative remedies and guidelines where the strict application of the Landscape Ordinance would create an undue hardship. If the administrative remedies and guidelines as described within Section 14-502 does not relieve the undue hardship, requests for use of alternative landscaping schemes or variances are justified only when one or more of the following conditions apply:

- 1. Topography, soil, vegetation, or other site conditions are such that full compliance is impossible, impractical, or ineffective. If the request is a variance in the screening requirements, a letter shall be required from the owners of the abutting property to acquiesce with the variance or alternative landscaping scheme
- 2. Due to a change of use of an existing site, the required screening requirements (buffer yard) are larger than can be provided as required by the provisions of this ordinance.

- 3. The site involves space limitations or unusually shaped parcels.
- 4. When the strict application of this Landscape Ordinance would impact the safety of the general public.
 - A. A variance application must be completed and a \$100.00 fee submitted to the City Codes and Inspection department.